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Technology Update



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# Montana Schools

OFFICE OF PUBLIC INSTRUCTION  
Ed Argenbright, Superintendent

SPRING 1988

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VOLUME 31, NO. 3

## Project Excellence: Right on Schedule

The third phase of the Board of Public Education's PROJECT EXCELLENCE: Designing Education for the Next Century has begun "right on schedule," according to Board Chair Alan Nicholson. This phase is the work of the Implementation Action Group which held its first meeting on Friday, January 8.

PROJECT EXCELLENCE is the Board's response to the 1987 Legislature's request that the Board determine the adequacy of state accreditation standards, those requirements all public schools must meet to receive state funding. The Board chose to do a comprehensive accreditation study involving the public and educators.

The Implementation Action Group is made up of the chair and one member from each of the eight program action groups. Their first responsibility will be to fit together the work from the second phase into a complete draft document and to develop appropriate implementation procedures for the new accreditation standards.

Members of the Implementation Action Group include Cynthia Baumann, elementary teacher, Lewistown; Bob Brown, secondary teacher, Whitefish; Annette Cade, school trustee, Clancy; Linda Carlsen, superintendent, Custer; Dr. Beverly Chin, professor, University of Montana; Jim Cusker, secondary teacher, Missoula; Natalie Fitzpatrick, retired teacher, Anaconda; Jim Foster, superintendent, Chester; Kyle Harris, lay person, Helena; Anita Johnson, school trustee, Lewistown; Kay McKenna, county superintendent, Lewis & Clark County; Dr. Alex McNeill, professor, Montana State University; Terri O'Fallon, principal, Ronan; Ken Walsh, lay person, Twin Bridges; Mignon Waterman, school trustee, Helena; and Jim Williamson, curriculum administrator, Billings.

PROJECT EXCELLENCE began last fall with a day long, public direction-setting meeting. Close to 500 teachers, administrators, trustees, college faculty, legislators and lay people attended from across the state. At that time participants examined what students should know and be able to do to make them productive citizens in the next century and, based on that, what the role of the school and the state should be in the education process. An executive summary of that meeting was published and is available from the Board office.

The phase two task was to write new outcome-based accreditation standards, using ideas from the direction-setting

meeting and educationally sound principles. The 78 members (selected from over 500 applicants) were divided into eight program action groups: Arts, Communications, Health & Physical Education, Mathematics, Science, Social Studies, Vocational/Practical Arts, and Services (including Library, Guidance and Administration). These action groups have met three times. In their first meeting they developed program goals to be incorporated as outcomes in the new accreditation standards for each of their areas. Next they added the resources and processes needed for these outcomes to be reached. Finally, they compared what they had written with existing standards. After each meeting drafts of work produced were shared with countless individuals and professional groups for further refinement.

The Implementation Action Group will spend the next three months fitting the work from various program action groups together into a draft document. This draft document will be presented and discussed at the May 2nd and 3rd meeting of the Board of Public Education in Helena. After this meeting a series of public Board hearings on the draft document will be held around the state. The hearings will begin at 7 p.m. and will be held in local public school facilities. Specific places and dates will be announced closer to the hearing dates.

Testimony from the public hearings will be used during the summer of 1988 to further revise and refine the document. The Implementation Action Group will meet with the Board of Public Education during the summer to determine appropriate implementation measures.

*continued next page*



The Arts Action Group begins work in Lewistown on learner outcomes for third, eighth and twelfth graders in all arts areas: music, art, dance, drama and literary arts.

## FROM THE SUPERINTENDENT



While the state picture looks grim at times and while I know that local educators are worried about their individual schools, we must all remember that we do an amazing job of educating children in our state and our nation. **Our job is the most important job, and we are doing it well.**

One bright note this winter has been the work of my Economic Task Force. The task force consists of Tammy Hall, consultant, school trustee, Bozeman; Nancy Davidson, D. A. Davidson, Great Falls; Arnold Reed, retired, sales, Billings; Mark Etchart, rancher, former legislator, member of Constitutional Convention, Glasgow; George Lambros, developer, Missoula; Alan Nicholson, developer, Chairman of the Board of Public Education, Helena; and Bill Cooper, superintendent of schools, Kalispell.

The purpose of the task force is twofold. First, it will examine Montana's educational system as a crucial component of our state's economic picture. Second, it will investigate how Montana's high quality educational system can be an important selling point in attracting new business to our state and in encouraging businesses to stay in Montana. Education is a vital part of the **answer** to our economic future; it is not part of the problem.

One of the first steps of the task force was to develop a survey document to help schools see themselves as part of the economic picture in the community and to present themselves in that way.

I am very excited about the enthusiasm and interest these people display toward Montana schools and students, and I know that the results will be of interest to all educators. We will keep you informed as the committee's work progresses.

—Ed Argenbriht  
State Superintendent



Diane Kielblock, paralegal assistant in OPI's Legal Services Department, recently left her job to join a Helena law firm. Shown with Kielblock are State Superintendent Ed Argenbriht (left) and former Deputy State Superintendent Alve Thomas.

## Project Excellence (cont.)

Next fall the Board will hold a final public hearing on the revised accreditation standards before presenting its report to the 1989 Legislature.

The Board is working with the Interim Study Committee, the Legislative Council, the Interim Finance Committee, the Legislative Fiscal Analyst, and the Office of Public Instruction to coordinate all phases of PROJECT EXCELLENCE and House Joint Resolution 16.

"It is because of the dedication and innovation of the membership of these action groups that they have kept PROJECT EXCELLENCE on schedule," according to Ted Hazelbaker, Board member and Chair of the Accreditation Committee overseeing the project. The Office of Public Instruction has provided technical assistance to each of these groups. "Both the OPI personnel and the members of the action groups are to be commended for the high level of productivity in this effort," Hazelbaker added.



Curly Burns, Veterans Education Specialist at OPI, serves as facilitator for the Vocational Education/Practical Arts/Traffic Education Action Group.



Paul Dorrance (center) and Lee Holmes (right) discuss with Superintendent Ed Argenbriht the current delivery of instruction to rural Montana schools through EDUNET, a computer-based system for linking students with classroom instructors. Currently 14 schools from Westby to Troy are receiving classes in drafting, electronics, Spanish, physics and accounting I. Possibilities for future classes include basic adult literacy, art appreciation, music appreciation, accounting II, business law, database, French and electronic mail.

## MONTANA SCHOOLS

*Montana Schools* is published quarterly (September, December, February, May) by the Office of Public Instruction, State Capitol, Helena, MT 59620. It is distributed to public schools and members of boards, associations, organizations and individuals interested in education in Montana.

Deadlines are six weeks before the first day of the publishing month (e.g., six weeks before September 1).

Ed Argenbriht  
State Superintendent  
of Public Instruction

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the Superintendent/Editor

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Lori Clark  
Typography

# Thanks from 'Down Under'

This is not an article "about" Montana schools but more a "thank you" to Montana schools for allowing a foreigner in to their halls and classrooms to be a part of their education system in order to learn from the teachers and children.

I am a teacher from Melbourne, Australia participating in the International Teaching Fellowship exchange program for twelve months. I arrived in December 1986, and when you read this, I will be home on summer vacation.

The exchange program provides the opportunity for Australian and American teachers to live and work in a foreign country while swapping houses and schools for twelve months. I was fortunate enough to be exchanged to Montana and have had a very productive and interesting year. I will be returning home with many new ideas and valuable experiences.

First hand experience teaching a fourth grade in Anaconda allowed me to understand and implement the school's curriculum and philosophy. The system in America is so very different from our system in Australia, both on a state and local level. Our education system is administrated and funded by the state government but controlled by regional and local levels. All schools are funded on a per capita levy, built and staffed by the state yet have curriculum and school budgets determined by the individual schools. It was interesting for me to see how the school boards operate and how much of the curriculum revolves around textbooks. I had an excellent opportunity to extend this understanding of the system when I joined the staff of the Office of Public Instruction in September. As classroom teachers we rarely have the chance to see other teachers in action, nor to see how different schools and rooms are set up. It has been invaluable to me to be able to visit many schools and see a wide variety of teaching styles and methods. I am returning to Australia with a sack full of ideas across the curriculum and would like to thank all the teachers who so generously allowed me into their classrooms. I was made very welcome by many principals and their staffs and enjoyed sharing ideas and philosophies with all of them.

In addition it was a very gratifying experience to be invited into some schools to share some of my background knowledge on language experience and integrated curriculum. I hope that I was of some limited assistance to the teachers who were looking for an alternative way of teaching their classes.

I guess by writing this I am trying to encourage many of the teachers in Montana to think of applying for the International Teaching Fellowship Program. Although the systems

are so different and the adjustments to be made in a different culture are great, I cannot recommend the exchange program enough. I have had a valuable year's education and learned and shared so much, as well as lived in a wonderful state. The possibilities and advantages are unlimited and there are so many experienced teachers in Montana who could share so much both in Australia and in Montana when they returned. Any teacher interested in exchanging schools and houses with a teacher in Australia need only contact Ed Eschler at the Office of Public Instruction and ask for particulars. (See related story on this page.)



Office of Public Instruction staff members presented a Montana flag to Jan Bedson on her last day at the Office of Public Instruction.

I have often been asked "Which system is better," and have only been able to reply "They are so different that they cannot be compared." Each system has strengths and weaknesses that are a product of the basic structure of the system and need to be evaluated with the differences in mind. I have learned a great deal and reinforced my personal educational philosophy with methods and styles I have seen here.

It will be very hard to settle back to teaching in my own school when I return to Australia after such a stimulating year here in Montana.

Thank you all for making the exchange a worthwhile and beneficial one.

Jan Bedson  
44 Huntingfield Dr  
Werrisbee 3030  
Victoria Australia

## Australian Teaching Fellowships Available

Once again OPI will be accepting applications for the International Teaching Fellowship Program. The 1989 Exchange will be between Montana teachers and teachers from the Department of Education, Victoria, Australia. Fellowships are offered to elementary and secondary teachers who have at least four years of teacher training and at least five years of teaching experience. There will be a direct exchange of teaching positions and accommodations for the position. Travel arrangements are not included. **Applications must be received by the end of March 1988.** For more information, contact Edward Eschler, OPI, 444-4433.

Currently, there are four exchanges involving Montana/Australian teachers:

Barbara Clayton, Muldown Elementary School, Whitefish, and Pauline Fry, Toorloo Arm Primary School, Toorloo Arm, Victoria.

Michael Fredrickson, Sentinel High School, Missoula, and Graeme Trickey, Stawell Sev, Stawell, Victoria.

Donna R. Jackson, Ray Bjork School, Helena, and Bruce Usher, Williamstown Primary, Williamstown, Melbourne.

Carole Sowden, Smith School, Helena, and William Eckersley, Rosamond Special School, Footscray, Melbourne.



Bob Stockton and Erma Polich are the longest tenured staff members at OPI. Erma has worked for five state superintendents—a total of 29 years in the accounting department. Bob Stockton joined OPI in 1965 and has spent 23 years helping educators work through school finance questions. If you want to know anything about OPI history, these two have the inside scoop.

# 1988's Christa McAuliffe Fellow, Mac Swan

by Eva Pieper, Polson High School

Mac Swan, Polson High School English teacher, was named the Christa McAuliffe Fellow for the state of Montana. The proposal Swan entered in the fellowship competition was entitled "Montana: Let There Be Lit!"

Swan, an 11-year veteran of Polson Public School's teaching staff, helped develop and has taught a class in Montana literature. In addition, he has served many years as Polson High School's head speech and debate coach.

In 1979 Swan participated in the Montana Writing Project and has served since then as a writing consultant to other schools in the state. He also served as a member of the Board of Directors of the Montana Association of Teachers of Language Arts and coordinated the National Council of Teachers of English Achievement Awards in Writing Program for Montana.

Swan spent about three weeks writing his program proposal, and then sent it in to the Board of Public Education in Helena.

Swan's proposal beat out 16 other proposals from throughout Montana and was accepted by the Christa McAuliffe Fellowship Selection Committee.

Swan said his proposal is to "encourage exploration into the special artistic treasures of the 'Treasure State,'" by issuing a three-step plan to get teachers in the region to teach Montana literature in the English class.

The first phase of Swan's plan started in August and continued through December. He is presently reading and studying works of Montana literature and determining which Montana authors are used in high schools throughout Montana. He also is trying to find out if English teachers in the region would be interested in using Montana literature.

The second phase, from December through April, is to develop a curriculum and create support materials such as

tests, discussion questions, audiovisual presentations, and activities that should be used to teach Montana literature. During this time, Swan will also write book reviews on the books he has read by Montana authors.

"I know the frustration of squeezing essential curricular planning around myriad other duties: coaching, committee meetings, selling tickets at the football games," Swan said.

When Swan's project is completed, interested teachers will have resources available to aid in planning classes. "Because of availability of instructional materials, Montana teachers will increase preparation time and improve their classroom effectiveness," Swan explained.

"The readily implementable programs for various levels of secondary students and support materials which I will produce will encourage classes in Montana literature statewide," the Polson teacher added.

The third phase of this project will last from May 1988 through June 1990. During these two years, Swan plans to present a minimum of four regional workshops which will involve persuading and teaching teachers to conduct Montana literature classes.

Swan added that he believes Montanans should learn about Montana writers. He said, "On the plains of Montana, secondary students struggle dejectedly through irrelevant passages of Thomas Hardy and James Fenimore Cooper, unaware that great writing, meaningful art which speaks directly to their time and their place, to them, is being produced by fellow Montanans." "Isn't it odd," Swan said, "that in our attempts to give students 'culture' that we neglect Montana's heritage, our own uniqueness?"

The federal government set aside \$2 million as a memorial to Christa McAuliffe for programs such as this. McAuliffe was the teacher who perished in the Challenger Space Shuttle disaster. Each state has had the opportunity to name a fellow for one time only.

Swan received \$25,313 for this research project from the federal government, which is the nationwide average for teachers at Swan's level. Swan also received School District 23's one-year sabbatical compensation.

"We are pleased to have Mr. Swan selected as the first Montana recipient of the Christa McAuliffe Fellowship," said Polson Principal Donald Freshour. "Mr. Swan has worked hard and is a talented teacher."

Swan will be back teaching at Polson High School next year. A part of the sabbatical agreement requires him to teach two more years in the classroom, one of those years at Polson.

Swan added that he didn't want to leave school for the year, and he has actually dreamed about being back at PHS teaching. He misses the kids in the classroom.

*This article was submitted by Judie Woodhouse, Journalism Teacher at Polson High School. Eva Pieper is a senior journalism student and editor of the school newspaper at Polson High School.*

Nomination forms for 1988-89 Christa McAuliffe Fellowships are now available from Ray Shackelford, Office of Public Instruction; Claudette Morton, Board of Public Education, or Mike Pichette, Governor's Office. Deadline for application submission to the Board of Public Education is March 14. The Board will take final action on Montana's winner on March 24, and awards will be announced by Secretary of Education Bennett in May.

## NEWS BRIEFS

### WINNERS OF BUS SAFETY POSTER COMPETITION ANNOUNCED

Winners of this year's school bus safety poster contest have been announced by Jeanne Pfeffer, OPI's School Transportation Coordinator. Winners, their schools, and their teachers were: 1st place—Jenny Belote of Cascade, teacher Marie Pribyl; 2nd place—Julie Barrett of Augusta, teacher Dan Carter; 3rd place—Megann Sept of Cascade, teacher Marie Pribyl.

The first place poster was sent to national competition and will be on display at the National Association of Pupil Transportation in Norfolk, Virginia. The national winner was from Georgia.

### FOUR FINALISTS NAMED IN NATIONAL TEACHER OF THE YEAR PROGRAM

A business education teacher from Alabama, a social studies teacher from Alaska, a prekindergarten teacher from New York and a seventh grade geography/history teacher from Tennessee have been named as finalists in the 1988 National Teacher of the Year Program. These teachers now advance to a final round of evaluation—a personal interview by the selection panel—before one is named next spring 1988 National Teacher of the Year.

This year's national honoree—chosen from among the country's more than 2.5 million elementary and secondary school teachers—will be feted at a White House ceremony in April at which a crystal apple, the symbol of excellence in teaching, will be presented.

Sponsors of the National Teacher of the Year Program are Encyclopaedia Britannica Companies, Good Housekeeping magazine, and the Council of Chief State School Officers. The program has been conducted annually since 1952.

### MONTANA CHALLENGE PROJECT

School districts are invited to participate in the Montana Educational Challenge Project's Administrative Intern Program. This performance-based program provides districts a way to expand their administrative component where needed or to provide continuity when an administrator plans to relocate or retire.

The school district identifies a teacher or other staff member with the potential to become an intern and enters a cooperative agreement with a college for the person to pursue graduate studies (special seminars and summer sessions) and internship service in administration under the supervision of one of the district's current administrators.

The program is a cooperative endeavor of the University of Montana, Montana State University, the Board of Public Education and the Office of Public Instruction.

Districts should express interest in participating by March 18, 1988, so that their candidate may take part in the 1988 summer session at one of the two universities. Program details may be obtained from Dr. John Voorhis, Director of Teacher Education, Certification and Staff Development, Office of Public Instruction, Helena, MT 59620 (444-3150).

### CERTIFICATION STANDARDS AND PRACTICES ADVISORY COUNCIL BEGINS WORK

Leo Perkins, Deer Lodge elementary teacher, was elected chair of the Certification Standards and Practices Advisory Council. Dr. Lee Von Kuster, of the University of Montana, was elected vice-chair.

Other members of the council include Dr. Susan Mast, teacher, Bozeman; Mary Sheehy Moe, teacher, Columbia

Falls; Betty Jean Olson, teacher, Outlook; Joe McCracken, district superintendent, Lockwood Schools; and Everett Breigenzen, school trustee, Glasgow.

The council, created by the last legislature to advise the Board of Public Education on all matters relating to teacher education and certification, held its first meeting in Helena in December.

The council's next meeting will be March 3 and 4 in Helena. The agenda will include certification alignment, endorsement inconsistencies, and distance learning. The meeting is open to the public. Anyone wishing an agenda should contact the Board of Public Education, 33 South Last Chance Gulch, Helena, MT 59620, 444-6576.

### MONTANA TO BE REPRESENTED IN NATIONAL DRUG-FREE SCHOOL RECOGNITION PROGRAM

Sidney Senior High School, Meadow Hill Elementary School in Missoula, and Riverview Elementary School and C. M. Russell High School in Great Falls have been selected to represent Montana in a national drug-free school recognition program.

The recognition program, in its first year, was established by the U.S. Department of Education as a means of recognizing those schools which are doing exemplary work in the areas of drug prevention and intervention in an effort to provide a drug-free environment for their schools and students.

"Each of Montana's four winners represents a strong effort in prevention as well as a commitment to community involvement and cooperation," State Superintendent Ed Argenbright said in announcing the state winners.

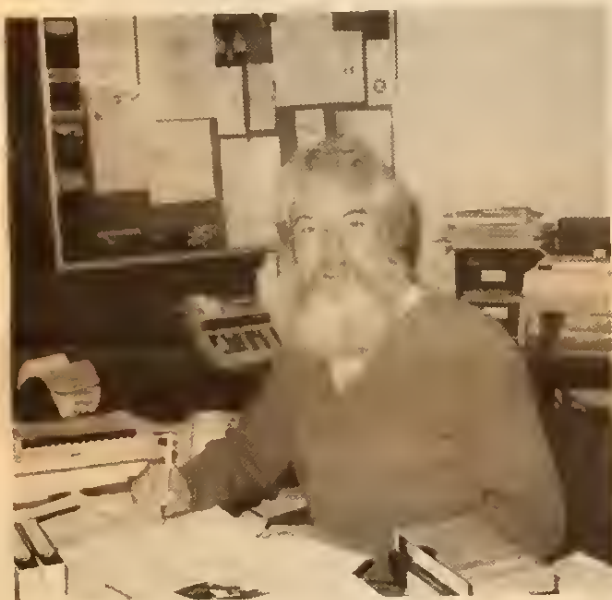
Winners selected by the U.S. Department of Education will receive on-site review and will become "demonstration schools" or model programs for other districts.

# State Task Force Studies Telecommunication Technologies



The 1987 Montana Legislature passed a joint resolution (HJR58) which asked the Commissioner of Higher Education to establish a Task Force on Telecommunication Technologies. The purpose of the task force is to study and coordinate the implementation of telecommunications and technology based delivery systems for education, government, and the private sector in Montana. Superintendent Ed Argenbright appointed Ron Lukenbill as OPI's task force representative.

Dr. Carrol Krause is chairman of the task force which is made up of representatives from K-12 education, higher education, business interests, local and state government agencies, professional organizations, and members of the Montana legislature. The task force has as its overall goal, "to ensure that all Montanans have access to the fullest array of telecommunications capabilities—voice, data and video—linking them with other Montanans and with the world, supporting lifelong education, economic development, and enhanced personal interaction."



Ron Lukenbill, NDN/Technology Specialist, is OPI's representative on the Task Force on Telecommunications Technology.

Three subcommittees are working on specific tasks: Dr. Stuart Knapp, Montana State University, is heading up a group which will "identify current and potential uses and user groups of enhanced telecommunications services, especially in support of economic development and lifelong education." Mr. Tom McGree, Mountain Bell, heads a group which will "identify and make known the current telecommunications capabilities within Montana, and to recommend additional needed telecommunications capabilities." Mr. Tony Herbert, Montana Department of Administration, and Dr. Robert Alhrecht, Montana University System, co-chair a subcommittee which will "identify current and potential sources of funding to support an augmented and developing telecommunications infrastructure to meet the needs of Montana." The task force will report the results of its study to the legislature in 1989.

One early finding of the task force is that an extensive number of Montana schools and communities already are exploring the use of audio, data, and video technologies to expand their educational and staff training programs. Local education and business partnerships are being formed in several areas of the state to develop multi-community/county educational technology plans.

For more information on the task force or distance learning in general, contact Ron Lukenbill, Montana Facilitator Project, Office of Public Instruction, 444-2080.

## Telecommunications Glossary

**Audioconference**—A telephone conference call using special equipment to maintain the strength of the signal among all parties.

**Baud Rate**—The speed at which data is transmitted, measured in bits per second. Common baud rates are 300 and 1200 (this means about 30 or 120 characters per second).

**Bulletin Board System (BBS)**—An electronic system for posting messages by computer which can be read by anyone else who is a member of the system.

**Communications Satellite**—A satellite in geostationary orbit 22,300 miles above the equator used to facilitate audio, video, and data communications on earth. There are currently 42 for use in the U.S.

**Communications Software**—A computer program which allows your computer and another to send and receive messages using a modem and telephone lines.

**Dedicated Phone Line**—A phone line which is used only for data transmissions from one computer to another.

**Distance Learning**—An environment where the learner and the instructor are separated by a distance but interact through various combinations of telephones, computers, print materials, television monitors, videotapes, fiber optics, or satellites.

**Downlink**—A facility which uses a small dish antenna to receive a microwave signal from one of the transponders (up to 24) on a satellite usually in the form of a television program.

**Download**—A process whereby data (files) are transferred from a remote computer to your computer.

**Electronic Mail (E-Mail)**—A system for sending and receiving public or private messages by computer. Users are required to have an ID and a password.

**Information Utility**—A company which provides information via computer access, i.e., CompuServe, THE SOURCE, DIALOG.

**Modem**—An acronym for MOdulator-DEModulator, a device which allows a computer to transmit and receive data over a phone line. You need one of these if you are going to use a Bulletin Board System or E-Mail.

**Off-line**—Your status when you are not connected by phone line to another computer.

**On-line**—Your status when you are connected by phone line to another computer.

**Real Time**—A transaction which occurs without significant delay from start to finish, i.e., taking a class from a "live" instructor and getting immediate feedback as opposed to watching a videotape of the class sometime after the actual event.

**SYSOP**—An acronym for SYStem OPerator, the person who manages or "runs" a bulletin board system.

**Technologies**—The human and machine systems by which a group provides its members with those things needed or desired.

**Telecommunications**—The transmission of audio, video, or data signals from one source to another.

**Transponder**—An acronym for TRANSmitter-resPONDER, a component of a telecommunications satellite which receives and amplifies signals from an earth uplink station, and then redirects the signal toward earth downlink antennas. A single satellite, using different frequencies, can have up to 24 transponders in use at the same time. Transponder numbers are converted to channel numbers according to a conversion table.

**Uplink**—A facility which uses a large dish antenna to send a microwave signal from earth to one of the satellites used for communication with one or more downlink receiver sites back on earth. Some signals may be encrypted (scrambled). Movies and premium events are usually encrypted while educational programs are not.

**Upload**—A process whereby data (files) are transferred from your computer to another remote computer.

**Videotape**—A linear storage medium for audio-video programs. Tape must be fast-forwarded or rewound in order to access different frames.

**Videodisc**—A random access storage medium for audio-video programs. The disc spins at a high RPM and the read head of the videodisc player is able to access different frames in milliseconds.

## Last Chance to Register For Paideia Conference

There is still room available for the Paideia Conference which will be held at the Copper King Inn in Butte on April 22-24. Once you get to Butte, all expenses will be paid by a grant from the Burlington Northern Foundation. Featured speaker will be Mortimer Adler, nationally recognized author of *The Paideia Proposal* and other books.

The tentative agenda includes:

**Friday, April 22**—Banquet; speech by Mr. Adler on "The Wednesday Revolution"

**Saturday, April 23**—Small group seminars by Paideia Associates; demonstration by Mr. Adler with sixth graders discussing *Hamlet*; banquet

**Sunday, April 24**—High school and elementary groups (11:00 a.m. adjournment)

The conference will introduce the Paideia Proposal reform of basic schooling to educators in

Montana. Paideia is a Greek word meaning the general learning that all human beings should possess. The Proposal's credo is that the best education for the best is the best education for all. Paideia's most important goal is to help students in elementary schools and high schools to think and reason for themselves through Socratic seminars on great works and through coaching of skills such as reading, speaking and calculating.

A maximum of 50 four-person teams will participate. School teams can be made up of teachers, administrators and board of trustee members. The Paideia group suggests that teams include two teachers.

One OPI recertification credit will be granted, at no cost, to participants.

To register for the conference call Marilyn Miller, OPI, 444-3656.

# SPOTLIGHT ON

## Breadnet:

by John Forsyth  
English Teacher  
Wilsall Schools

The Shields River Flathead Creek. The Bridgers to the west. The Crazies to the east. Stunning day and night sky-vistas. These images and the features behind them make up much of the physical geography surrounding the small Montana community of Wilsall. There is, however, another geography which influences the students of the Wilsall schools: the geography of BreadNet.

BreadNet is a computer network which links teachers who participate or have participated in the Program in Writing at Bread Loaf School of English in Middlebury, Vermont. Each summer, teachers from around the country and the world gather in a rural setting in the Green Mountains to learn and share language arts strategies. Bread Loaf provides about 40 full tuition scholarships to secondary teachers who come from areas like rural Montana. Last summer two teachers from Montana attended Bread Loaf; one was leaving Wilsall and the other one was taking her place.

Thanks to the effort and involvement of Joanne Tulonen, a Bread Loaf student and former English teacher at Wilsall (she now teaches in New Hampshire), both elementary and secondary students have become members of the BreadNet community. In fact, the school received several Apple computers a few years ago through a grant administered by Bread Loaf.

In previous years, students in Wilsall have shared thoughts and cultures via computer modem with secondary students from a private school in suburban Pittsburgh, Pennsylvania, and a reservation school in Kyle, South Dakota, as well as second graders in Watertown, Massachusetts. Letters, biographies, interviews, and other forms of expression from across the country have made Wilsall, in spite of its physical distance from population centers, one of the least isolated schools in Montana.

This year, second and third graders at Wilsall are continuing to correspond with old friends and are making new friends in Massachusetts. Tracy Winn, the teacher administering the project in Massachusetts, vividly described the attitude of one of her students as he began to write his first letter this year:

"Yesterday, Brian, who is six, dictated his first letter to his pen pal in Montana. He was swept away by the process and was clearly exercising his how-to-make-friends skills, asking questions, telling about himself, wondering about the world out loud. Today, without yet hearing from his pen pal, he found a moment to tell me that he thinks he already likes Michael and that he can't wait to get a letter back. A little while later, he found me again to ask if they have the same money in Montana as they do in Massachusetts. When I asked why he said, 'Because I think I like my pen pal so much that I'd like to share my money with him.' I think that Brian likes the process of sharing himself in written form so much that he's willing to pay for it."

Exciting things have been happening in the high school, too. This year the entire school organized into political parties and conducted an election campaign, complete with posters, slogans, and boundless political rhetoric. Students spoke, debated, and worked together in an effort to win election to five "national" and "state" offices. Winners received a bag of candy bars to distribute—a sweeter if less permanent form of political patronage.



"Students formulate a platform plank for their party."



"Eleventh-graders rehearse their campaign speeches before taping for electorate."

For further information on the Bread Loaf Full Tuition scholarships at Bread Loaf, address: Administrative Assistant, Bread Loaf School of English, Middlebury College, Middlebury, VT 05753.

# Wilsall Meets the World

How did BreadNet fit into this picture? At the same time Wilsall students made their way through the "campaign jungle," students at Summit High School in Frisco, Colorado, were doing virtually the same thing. Through both informal correspondence and more formal writing assignments, transmitted by computer the same day they were written, students from the two schools shared reactions to their experiences while they explored their varied backgrounds and environments. The schools exchanged introductory videotapes as well as written and video speeches, and each school formed part of the electorate for the other school in the culminating event—the general election. Informal correspondence will

continue, and many students may establish friendships which extend far beyond the school setting. The project itself was created by two teachers who were roommates and became good friends at Bread Loaf last summer.

We have attained an authentic audience for speaking and writing, a broader view of the world, and friendships for years to come. Thanks in part to Bread Loaf and BreadNet, the world comes to students who live in an isolated valley between the Bridgers and the Crazies, under the wide, Montana sky. Thanks in part to Bread Loaf and BreadNet, a small but special part of Montana touches the world.



before taping for their Colorado



"Ninth-graders discuss strategy on the campaign simulation."

Bread Loaf Program in Writing and full loaf, address correspondence to: Ad- f School of English, Box 100, Mid- 5753.

# RESOURCE NOTES

## SCHOOL FOODS

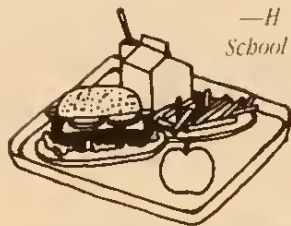
### Summer Food Program

The Office of Public Instruction once again will administer the Summer Food Service Program in Montana. This program is intended to provide a nutritious lunch, breakfast and/or snack for children in need of such meals during summer months when school is not in session. Schools serving an area where more than 50 percent of children are eligible for free or reduced price meals or who offer enrolled programs for needy children are urged to consider the feasibility of sponsoring and participating in the Summer Food Service Program.

The reimbursement for Summer Programs is such that a properly administered program will be self supporting.

Interested schools should contact H. Brishin Skiles, Director, Division of School Food Services, Office of Public Instruction, Helena MT 59620.

—H. Brishin Skiles  
School Food Services



## ARTS IN EDUCATION

### March is "Youth Art Month" and "Music in Our Schools" Month

March will be a wonderful chance to encourage and support the arts in your schools. If you wish specific information, contact Charlene Greene, Hillcrest School, Butte 59701 (723-3293) about Youth Art Month and Marilyn Winter, 1100 Legion Lane, Butte 59701 (723-9226) about Music in Our Schools Month.

### Montana Student Art Exhibition

Each spring the Montana Art Education Association sponsors a statewide traveling art show titled "Montana Student Art Exhibition." Please contact Madeline Kraner, Bozeman Senior High School (585-1650), for information about submitting student art work, K-12, including media and dimensions.

### Visual Art Curriculum Development Course

"Birch Creek II," a visual art curriculum development course, will be offered at Western Montana College, Birch Creek Camp, utilizing the new visual art curriculum guide created by the Arts Consortium. Look for the WMC Summer 1988 Brochure for information about the course which will be offered for credit and for which partial scholarships may be offered to any teacher with an art teaching assignment.

### "The Education Explosion: Lifespan Learning"

This year, the New Horizons for Learning Conference, which has been held since 1985, will be on June 25-29 near Washington, DC at George Mason University. Entitled "The Education Explosion: Lifespan Learning," the conference will focus on learning and human development from pre-birth to the senior years and will bring together an international group of distinguished presenters who will demonstrate that intelligence is an open, dynamic system that can continue to develop throughout life. Cosponsors include IBM, PBS, the Association for Supervision and Curriculum Development, the National Education Association, the Institute of Cultural Affairs, and the Coalition of Adult Education Organizations. Brochures will be available in February. For information contact Janet Athwal, OPI (444-4422) or NHFL, 4649 Sunnyside North, Seattle, WA 98103, (206) 547-7936.

—Janet Athwal  
Arts in Education Specialist

## SCIENCE

### High School Science Student Honors Program

In its third year of operation, the U.S. Department of Energy (DOE) High School Science Student Honors Program has been expanded to six separate programs. Since 1985, the Department's Honors Program has sent 364 U.S. high school students to four national laboratories for first-hand, state-of-the-art research experiences. This year, the program has been expanded to six national research laboratories, and Montana will be able to select six of our best science students to take part in these very prestigious activities. Many past participants, now enrolled in college, commented on the importance of this experience in developing career goals in science and technology. Several of these students were able to return to the laboratories as summer research interns.

These programs are sponsored and funded by the Department of Energy. The Montana Office of Public Instruction will coordinate the search, but final selection of participants will be made by the Governor's Office. Watch your mail for further information.

DOE High School SUPERCOMPUTER Honors Program at the Lawrence Livermore National Laboratory in Livermore, California. **July 9-23.**

DOE High School PHYSICAL & LIFE SCIENCE RESEARCH Honors Program at Brookhaven National Laboratory in Upton, New York. **July 27-August 8.**

DOE High School PARTICLE PHYSICS RESEARCH Honors Program at the Fermi National Accelerator Laboratory near Chicago, Illinois. **June 19-July 3.**

DOE High School LIFE SCIENCE Honors Program at Lawrence Berkeley Laboratory in Berkeley, California. **June 26-July 8.**

DOE High School ENVIRONMENTAL SCIENCE Honors Program at the Oak Ridge

National Laboratory in Oak Ridge, Tennessee. **July 9-23.**

DOE High School SUPERCONDUCTIVITY Honors Program at the Argonne National Laboratory, Argonne, Illinois. **July 24-August 6.**

For further information contact Bob Briggs (444-4439) or Dan Dolan (444-4436).

—Bob Briggs  
Science Specialist

## GIFTED EDUCATION

### Mini-Grants Available

The Foundation for Exceptional Children is offering mini-grant awards to individuals employed by a public or nonprofit educational institution. The awards, for up to \$500, will fund innovative education-related projects which directly benefit handicapped or gifted children or youth. Grants are awarded from July 1, 1988 to June 30, 1989. Completed applications must be postmarked by March 1, 1988. Applications are available from Nancy Lukenhill, OPI, 444-4422.

### State Gifted and Talented Proposals Due

Applications for 1988-89 gifted and talented state grants must be postmarked no later than April 8. The grants, to help public school districts strengthen the quality of elementary and secondary education through support of locally initiated proposals and activities designed to improve education practices for gifted and talented students, will be awarded on a competitive basis for one year only. Grant maximum will be \$5,000 and will require equal matching funds from local districts which reflect the objectives and activities of this particular grant. Term of the grants is July 1, 1988 through June 30, 1989.

Target population is any public school district, K-12, or any portion thereof, with identified gifted and talented students in such areas as creative and productive thinking ability, general intellectual ability, specific academic aptitude, leadership ability and visual and performing arts.

For proposal applications call OPI, 444-4422.

### Summer Mini-Grants Available

Mini-grants for summer programs to serve identified gifted and talented students or to provide teacher training in the area of gifted education will be awarded in amounts of up to \$1,000 from state appropriated funds. Grants will be based on the same criteria as regular school year grants, and a shortened version of that format will be used for this application. Funds must be expended by June 30, 1988.

Application deadline is April 15, 1988. For further information and application forms, contact Nancy Lukenhill, 444-4422.

### Grant Writing Workshop

A two-hour, nitty gritty grant writing workshop will be held March 26 at the Bil-

lings Holiday Inn in conjunction with the Annual Montana Association for Gifted and Talented Education (AGATE) from 10:00 a.m. to 12:00 noon. Participants attending should bring not more than three objectives for their grant based on a documentable need for their district.

### Speakers Announced for AGATE Conference

The 8th Annual Montana AGATE Conference will be held at the Billings Plaza Holiday Inn on March 24-26. Sectionals being offered will include advanced placement, after school programs, mentors, parenting the gifted, Project SUCCESS, scope and sequence in curriculum, and thinking skills in the classroom.

Speakers will include Nancy Polette, Professor of Education at Lindenwood College, a nationally recognized authority on literature for children and youth; Dr. John F. Feldhusen, Director of the Purdue University Gifted Education Resource Institute, editor of the "Gifted Child Quarterly," author or co-author of 19 books and monographs; Dr. Deborah Burns, an instructor with Dr. Joseph Renzulli in the Teaching the Talented Program at the University of Connecticut; and Judy Galbraith, founder and owner of Free Spirit Publishing Company, specialists in books for, not just about, gifted, talented and creative youth.

Join us!

## PUPIL TRANSPORTATION

### Assertive Discipline Program

We now have a copy of the Assertive Discipline Program for School Bus Drivers. Thanks to the Montana School Transportation Association (contractors), our Pupil Transportation Safety Resource Center has this program available for your use. It is available free of charge by contacting the Pupil Transportation Safety Office, Office of Public Instruction, State Capitol, Helena, Montana 59620 (444-4396). The program is checked out on a monthly basis. It will take you at least two to three weeks to present the entire program.



### How One School District Attacked Bus Driver Shortage

A school district in Connecticut has adopted new policies as part of an aggressive campaign to attract and keep school bus drivers. This year they will offer:

—free tuition to out-of-town students whose parents drive one of their school buses;

# RESOURCE NOTES

—free day-care for any preschool children of drivers, not only during their bus runs, but all day;

—guaranteed employment in the school system between bus runs; drivers can work in the cafeteria, library and other areas to accumulate enough hours for a full-time job.

Perhaps some Montana school districts will have to consider such tactics to attract school bus drivers in the future.

## Changes in Excise Tax on Gasoline

Effective January 1, 1988, schools no longer will be allowed to buy gasoline tax free. Instead, they will have to follow the same procedures that school bus contractors do: pay the tax and then file for a refund or credit on the tax paid.

## School Bus Parts

I have learned of a school bus parts dealer located in Portland, Oregon. If you are interested in receiving a catalog, contact Tom Rees, PO Box 13373, Portland, Oregon 97218.

—Terry Brown  
Pupil Transportation Specialist

## TRAFFIC EDUCATION

### Spring Conference 1988

The 1988 MTEA/OPI Traffic Education Conference will be held at the Heritage Inn in Great Falls on May 1-2 starting at 10 a.m. Sunday, May 1. We will conclude at 5:15 p.m. Monday, May 2 Northern Montana College will make one credit available. The program theme will be: *Extending Traffic Education to Our Special Populations*.

Our keynote speaker will be Sam McCullum, Director of the Washington Traffic Safety Commission, a ten-year veteran of the NFL and former wide receiver for the Bobcats. The conference will include a tour of the Montana State School for the Deaf and Blind as well as the following presentations: In-car Communications with the Hearing Impaired, Reteaching the Driving Task for the Disabled, Senior Citizen Driving Programs, Driver Services Update, Montana's Adapted Driver Materials Update, the Smith System, local program sharing, and a special theatrical presentation by the Taproot Theatre's Road Company Play "I am the Brother of Dragons."

A registration packet will be mailed to all traffic educators in March. If you do not get your materials by the end of March, let Curt Hahn know.

### The Great Motorcycle Helmet Controversy

Do you really need a helmet? Here is Dr. Eugene Alvarez's "scientific" proof. Just find a blunt instrument and hit yourself on the head. When you wake up, repeat the procedure with your motorcycle helmet on. The point should be clear enough.



## Speed Kills

Statistics show that your chances of living through an accident at 70 mph are only 50/50. But at 55 mph, the odds are 31 to 1 in your favor.

## Commuters

Commuting 10 miles every workday costs the standard size car owner about \$750 per year. If you car pool with one person, you save \$375; with three others you save \$562...and more every day, as gas prices go up.

—Curt Hahn  
Traffic Education Specialist

## MATH

### MCTM Math Contest

The annual Montana Council of Teachers of Mathematics Math Contest will be held at 11 sites in Montana during March. This contest has become an extremely popular event for students throughout the state in grades 7 through 12. Last year over 5,000 students participated. Registration deadlines will be in late February, and regional directors are sending out information to all schools during this month.

Dates, sites, and contact persons for this year's contest are as follows:

March 9—Kalispell Fred Longhart Flathead High School 644 4th Ave W Kalispell, MT 59901	March 24—Havre Steve Kunholt Math Dept Northern Montana College Havre, MT 59501
March 11—Glasgow Roger Patterson Outlook High School Outlook, MT 59252	March 25—Grass Range Sherry Horyna Grass Range High School P.O. Box 58 Grass Range, MT 59032
March 12—Billings Sue Mueller 1941 Avenue C Billings, MT 59102	March 24—Missoula John Knudsen 7335 Berlyn Missoula, MT 59801
March 12—Helena Fred Bell Radley School East Helena, MT 59635	March 26—Great Falls Ruth Lomica North Jr. High School 2601 8th St NE Great Falls, MT 59404
March 15—Dillon E. Otis Thompson Math/Science Division WMC Dillon, MT 59725	Bozeman—Date not set Lance Johnson Bozeman Jr. High School 309 N 11th Ave Bozeman, MT 59715
March 15—Baker Don Dilworth Baker High School Box 659 Baker, MT 59313	

The contest is divided into two levels of competition: junior high (grades 7-9) and senior high (grades 10-12). Schools are separated into three categories. Class A will involve all Class AA schools; Class B will in-

clude all Class A and Class B schools; and Class C will be all Class C schools.

All "mathletes" receive participation certificates; the top 15 percent receive superior ratings, and the next 20 percent receive Honorable Mention awards. The top mathletes in each regional contest receive a bronze pin, and the top teams at each level in the three school classifications receive a "Top Team" plaque.

Test results of all Superior mathletes will be entered in state competition. Once again, the top 15 percent will be awarded Superior State Certificates; the next 20 percent will receive Honorable Mention awards. A State Gold Pin will be awarded the top mathletes at the state level, and the top graduating senior boy and girl will be awarded the \$600 Joan Dolan Memorial Scholarship and the Adrien L. Hess Memorial Scholarship.

Last year, as a result of a tie in the top scorers, three scholarships were awarded. Recipients were Vicki Sackman of Terry; Peter Early of Park High School in Livingston; and Walter Finney of Missoula.

For additional information on the contest, contact your local regional director or Dan Dolan (444-4436).

### Applications in Mathematics Video Series

Three new videotapes have been received recently from the Applications in Mathematics (AIM) Project which is spon-

sored by the Mathematical Association of America. These three videotapes are in addition to the original three produced by the AIM Project for use by students in secondary schools. Each program includes a three-part video which poses a problem dealing with an application of mathematics in business and industry, how that problem is dealt with in the modern world, and a possible solution. Written materials—including a student resource book, teacher resource book, and a computer disk with programs describing each of the six applications—are also available. The six programs include:

1. A Backwater Curve for the Windsor Locks Canal
2. Pricing Auto Insurance
3. Testing Surface Antennas
4. Routing Telephone Service
5. Capturing a Satellite
6. Volcanic Eruption Fallout

The videotapes may be obtained by sending blank tapes to the Office of Public Instruction; we will duplicate copies for you. The six programs can be put on four 120-minute videotapes. Written materials and the computer diskette are available only from the Mathematical Association of America, 1529 18th Street N.W., Washington DC 20036. Complete ordering information will be sent if you wish to receive the tapes. For additional information on this program, contact Dan Dolan (444-4436).

—Dan Dolan  
Math/Computer Specialist



Patrick Lager (left) and Douglas McInnis are Montana's delegates to the 1988 United States Senate Youth Program in Washington, D.C.

Lager attends Shelby High School, where he is Student Body President. He is a member of the Student Council, National Honor Society, Key Club, state champion math team, Speech Club, and Drama Club. He plays football and golf and also enjoys hunting and skiing. Patrick plans to study pre-med in college and obtain a post graduate education in medical research.

McInnis attends Loyola Sacred Heart High School in Missoula and serves as Student Body Vice President. He is a member of the cross-country team, speech team, National Honor Society, Boy's State, and Model United Nations. He is also active in community services. Hobbies include piano, running, listening to music, tennis, biking, and swimming. Douglas plans to study pre-med in college and then go on to medical school.

Lager and McInnis earned a trip to Washington, D.C. for a week of intensive study of the federal government and the United States Senate.

Each of the 104 delegates will also receive a \$2,000 college scholarship, which, along with the program, is made possible by a grant from the William Randolph Hearst Foundation.

# UNCLASSIFIEDS

*Unclassifieds is a bulletin board of resources, events and announcements of interest to educators. The naming of a service or product does not mean a recommendation or endorsement by the Office of Public Instruction.*

## CONTESTS

### ESSAY CONTEST TO CELEBRATE 75TH ANNIVERSARY OF THE FEDERAL RESERVE BANK

In 1988, the Federal Reserve System is observing its 75th Anniversary as the nation's central bank. To encourage students to study the bank and to celebrate its anniversary, the Federal Reserve Bank of Minneapolis is sponsoring an anniversary essay contest. In their essays, 11th and 12th grade students will be asked to answer the following question:

*The unique structure of the Federal Reserve System allows it to act independently from government. However, some people think the Fed is too independent and, given its important responsibilities, changes should be made to limit its independence. Should the current structure and independent status of the Federal Reserve be maintained, or should it be modified to give Congress more control?*

To assist students in researching and writing their essays, a resource materials packet will be provided to each participant.

Each finalist will receive a \$75 savings bond. In addition, the first place winner will receive a \$200 savings bond, and the runner-up will receive a \$100 savings bond.

All finalists and a guest will be invited to attend the culminating activity of the essay contest, a workshop and awards program at the Minneapolis Federal Reserve Bank on November 18, 1988.

For more information, rules and entry blanks contact Essay Contest, Public Affairs, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis MN 55480.



## TELECOMMUNICATIONS

### BIG SKY TELEGRAPH OF WESTERN MONTANA COLLEGE

**Big Sky Telegraph** is a grassroots telecommunications project headquartered at Western Montana College. The **Big Sky Telegraph**, a multiple phone line, electronic bulletin board system, is a resource/information sharing network for

rural educators. Two grants—\$51,000 from the M.J. Murdock Charitable Trust and \$15,000 from the Mountain Bell Foundation—awarded to the WMC Rural Education Project and the rural educators of Montana help fund the project.

Many of Montana's 114 one-room schools already have a microcomputer and phone line. The WMC **Big Sky Telegraph** project provides a modem to each one-room school allowing teachers fingertip access to peers, WMC faculty and a variety of other resources. For example:

- educators can conveniently question each other on available resources, expertise and lesson plans via group messaging;

- a software/resource loan library and catalog listings are available to educators;

- rural educators have an information hotline to Western Montana College faculty, library, telecommunications resources and the Microcomputer Center; and

- a surrogate online community will be dedicated to serving the needs of rural communities.

Training for use of the system is available **online** at the rural schools using microcomputer telecommunications. An 800 number is available during the class to help educators keep costs down.

For a password or more information contact Frank Odasz, Asst. Professor of Computer Education, Western Montana College, Box 11, Dillon, Montana, or call at 1-800-WMC-MONT ext. 7338 (11 a.m.-Noon weekdays) or 406-683-6270 (home). If you have a modem, call 406-683-7680.

## RESOURCES

### Nutrition, Food and Culture: A New Approach to Social Studies

This set of ten 11" x 14" full-color study prints will help sixth and seventh grade social studies students examine the food habits, traditions and agricultural practices of eight cultures. It also relates them to a basic study of nutrition. The countries studied are Lapland, Kenya, Nepal, Algeria, Mexico, Korea, Japan and the United States. The prints are accompanied by lesson plans and activities to help students understand how differences in climate, physical and social environments, technology and trade affect food production and availability in each region. The kits are available at a special price of \$6.95 each from the Education Department of the National Live Stock and Meat Board, 444 North Michigan Ave., Chicago, IL 60611, (312) 467-5520.

### AIDS: Can I Get It

This 48-minute videocassette examines common concerns about this life-threatening disease and emphasizes that AIDS cannot be spread through casual contact. It is intended for a public ranging from chief executive officers to heads of households, focuses on AIDS as a venereal disease rather than as a mysterious "plague," and emphasizes the benefits of early detection. Experts from around the country, AIDS victims, and people on the street are inter-

viewed. The videocassette is available at a cost of \$9.95 from Light VT, 21 Highland Circle, Needham Heights, MA 02194, (800)-LIGHT-VT. Add \$2 for the first copy and \$.50 for each additional copy for shipping and handling. Closed caption available.

### AIDS and the Education of Our Children: A Guide for Parents and Teachers

Secretary of Education William J. Bennett has released this handbook of information and guidance about AIDS education. The publication includes a review of the known facts concerning the history and spread of the disease, guidance on establishing a framework for AIDS education, guidelines for selecting educational materials, a discussion of legal considerations for schools dealing with students and employees who have AIDS, and a listing of additional sources of information. Copies of the handbook are free from **AIDS and the Education of Our Children**, Consumer Information Center, Department ED, Pueblo, CO 81009.

### Pet Responsibility: Citizenship Lessons for Elementary Students

Sixteen ready-to-use lessons help students learn about citizen participation while becoming responsible about pet care, personally and in the community. The lessons—for use in science, social studies, language arts, and art classes—are organized into four units: How Can I Be Responsible?, Community Helpers and the Law, Conflicts Over Pets: How Disputes are Resolved, and Citizenship and Responsible Care. Included are teacher instructions, original stories, and illustrated handouts for student use. Copublished by the Social Science Education Consortium and the American Humane Association, *Pet Responsibility* (order no. 319-5) is available from SSEC Publications, 855 Broadway, Boulder, CO 80302 for \$9.95. All orders under \$20 must be prepaid.

### Science/Technology/Society: A Framework for Curriculum Reform in Secondary School Science and Social Studies

This guide, published by the Social Science Education Consortium, addresses a belief that today's young citizens must be prepared to deal with societal issues related to science and technology. It provides help in designing units of study that integrate knowledge from science and social studies. Order from SSEC Publications (order no. 313-6), 855 Broadway, Boulder CO 80302. The cost is \$9.95; orders under \$20 must be prepaid.

### Information on Special Education Computer Equipment

Many parents of the handicapped are buying computers to fulfill their children's needs. The Center for Special Education Technology provides free information on special education computer equipment. Call toll free 1-800-873-TALK, 9 a.m. to 5 p.m., EST Monday through Friday.

## Time Savers for National Women's History Month Programs

The National Women's History Project has produced comprehensive program organizing guides to support National Women's History Month in March. Titles and costs are: *Community Resources Program Planning Guide*, \$6.95; *101 Wonderful Ways to Celebrate Women's History*, \$6.95; *Women's History Community Organizing Guide*, \$6.95; *Women's History Resources*, \$6.50; *Real Women Creative Writing Competition Guide*, \$6.00; *Creative Arts Program Planning Guide*, \$6.95. Add \$2 to each order for shipping and handling. The complete 36-page catalog of multicultural women's history resources is available for \$1. Order materials from the National Women's History Project, Box 3716, Santa Rosa CA 95402, (707) 526-5974.

## CONVENTIONS

### Montana Home Economics Association

The Montana Home Economics Association Convention will be held on April 21, 22 and 23 in Lewistown. The convention theme will be "The Challenge of Change," and Dr. Don Warrick will speak on "Managing and Leading in Turbulent Times."



## 1988: SUMMER STUDY

### Fourth Annual Rocky Mountain Health Promotion Conference

The fourth annual Rocky Mountain Health Promotion Conference will be held June 5-10 at Eastern Montana College in Billings. The conference, sponsored by the Office of Public Instruction and the Department of Health and Environmental Sciences, is designed to promote and enhance comprehensive school health education programs and wellness programs for school staffs.

Session topics will vary from societal issues such as suicide, teenage pregnancy, drug abuse, health care and child abuse to personal issues such as eating disorders, exercise, stress management, smoking cessation and physical fitness.

College credit and dorm housing will be available through EMC.

For further information contact Glenn Iverson, HPE Dept., EMC, Billings MT 59101, 657-2397 or Spencer Sartorius, HPE Specialist, Office of Public Instruction, Helena MT 59620, 444-4434.

# UNCLASSIFIEDS

## Taft Seminar for Teachers

The University of Montana and the Taft Institute for Two-Party Government are sponsoring a Taft Seminar for Teachers dealing with American electoral politics. Participants in the four-credit graduate course will receive tuition, housing, meals, and books. Seminar dates are July 5-15. Interested teachers, administrators, and librarians who have responsibility for social studies, civics, or government in elementary and secondary schools should contact Dr. Jim Lopach, Seminar Director, Political Science Department, University of Montana, Missoula MT 59812 for information.

## Master of Science Teaching Credits

Science teachers can earn Master of Teaching credits in the summer at the University of Montana Biological Station at Yellow Bay on Flathead Lake. Contact Dr. David Bilderback, UM Botany Department, Missoula MT 59812, 243-5222.

## The Great Theorems of Mathematics in Historical Context

This seminar, one of the National Endowment for the Humanities' "Summer Seminars for School Teachers," will be held from June 27-July 29 at The Ohio State University. Public, private or parochial school teachers, grades 7-12, of mathematics, natural science and the traditional humanities disciplines constitute the primary audience for the seminar, although other school personnel, K-12, are eligible to apply. All applicants should have taken a calculus course. Those selected for the seminar will receive a stipend of \$2375 to cover summer expenses.

Application deadline is March 1. For more information write Professor William Dunham, NEH Seminar Director, Department of Mathematics, The Ohio State University, 231 W. 18th Ave., Columbus OH 43210.

## MONTANA WRITING PROJECT ACCEPTING APPLICATIONS FOR 1988 INSTITUTE AT UM

The Montana Writing Project is accepting applications for the 1988 Summer Institute, to be held June 20-July 15 at the University of Montana.

The Writing Project is a professional education program to improve the teaching of writing in all grade levels and all subjects.

During an intensive, four-week program in residence at UM, teachers learn to teach writing effectively, conduct writing workshops and use microcomputers in writing instruction.

Teachers teach one another effective writing techniques, work on their own writing, and critique that of their peers.

At the end of the summer institute, participating teachers are qualified Teacher-Consultants of Writing. They return to their school districts to conduct inservice writing workshops and to help other instructors teach writing. School districts sponsor outstanding teachers by paying a program fee of \$750 for each teacher they send to the institute.

For more information and to obtain ap-

plications, contact Beverly Chin, Montana Writing Project director, Department of English, University of Montana, Missoula MT 59812 (243-5231).

## Summer Study in England

From June 12-July 22, teachers and administrators K-12 will study in London and Oxfordshire, England; visit inner-city London schools, stay in London theatre district; live with a British family in Oxfordshire and teach in the local village school; attend workshops and lectures at Oriel College, Oxford University; visit cultural points of interest. Limited to 35 participants; \$2,800 cost includes tuition and books, room, board, coaches, fees, and trip cancellation insurance. Deadline for deposit is March 1. Contact director, Dr. Marian Tonjes, Education Dept., Western Washington University, Bellingham WA 98225, (206) 676-3337 or 733-5580 for further information. Please include phone numbers for day and evening contact.



## Summer Fellowships for Arts Teachers

The John F. Kennedy Center for the Performing Arts will offer fellowships for as many as seven teachers of the arts, representing the disciplines of music, theatre, dance, visual arts, film, and creative writing. Teachers selected will pursue an arts-related project in individual fields at Kennedy Center in Washington DC from June 29-July 19.

The program is open to full-time private or public schoolteachers of the arts. Priority is given to teachers who have had at least five years' professional arts teaching experience. Candidates may apply directly or be nominated by an individual or organization. Selection will be based on past accomplishment, community involvement, and the merit of the proposed project. Participants will receive \$2,000 stipend, housing, and tickets for many cultural events.

For more information and application materials, contact Teacher Fellowships, Alliance for Arts Education, The Kennedy Center, Washington DC 20566, (202) 254-7190.

## "Compose Yourself in Boulder"

"Writing About Literature: A Summer Institute for Secondary School Teachers of English or Language Arts" will combine the study of literary classics with the practice of writing through an intensive program of writing workshops, lectures on the classics, plays, films and poetry readings.

Participants receive six hours of graduate credit, an \$800 stipend, free room and board on the Boulder campus, travel expenses and a wide range of summer activities. Preference will be given to full time or part-time English or language arts teachers in a public or private junior or senior high school who teach both literature and composition and who are guaranteed by their principal the opportunity to teach at least two courses in composition or Advanced Placement English during the next year.

Application deadline is March 18. For applications and additional information, write or call Marcia K. Hoehreckx, Writing About Literature: An NEH Summer Institute, Department of English, Campus Box 226, University of Colorado at Boulder, Boulder CO 80309-0226, (303) 492-3606.

## Women's History Curriculum Conference

For the fifth consecutive year, the National Women's History Project will conduct two summer curriculum conferences, "A Woman's Place is... in the Curriculum," June 27-30 and August 8-11. Participants will be introduced to the concepts, strategies and resources for infusing multi-cultural women's history into the K-12 curriculum.

The conferences are designed specifically as intensive training sessions for mentor teachers, multi-cultural and sex equity specialists, curriculum specialists, Title IX coordinators, and classroom teachers. Participants will leave with the materials and information necessary to conduct effective inservice training sessions in their own districts. They will be able to effectively demonstrate the integration of multi-cultural women's history into all areas of the curriculum.

Registration for the sessions, which will take place in Santa Rosa, closes May 15th.

For further information, contact the National Women's History Project, PO Box 3716, Santa Rosa CA 95402, or call (707) 526-5974.

## AWARDS

### Outstanding Montana High School Science Teacher

The University of Montana, in cooperation with the Office of Public Instruction, will soon begin a search for the outstanding Montana high school science teacher. The person selected will receive a 10-week research appointment for the summer of 1988 at the Solar Energy Institute in Boulder, Colorado. The appointment includes a \$5,000 stipend and a \$1,000 relocation allowance. Research may be done in a broad range of disciplines including biology, chemistry, physics, computer sciences and engineering. Application materials will be sent to science teachers soon. Until then, if you have questions, contact Dr. Pepi, Department of Education, 136 Liberal Arts Hall, University of Montana, Missoula Montana 59812 or Bob Briggs, OPI (444-4439).

## Presidential Awards for Excellence in Science and Mathematics Teaching

Nominations are now being accepted for the 1988 Presidential Awards for Excellence in Science and Mathematics Teaching. Six finalists, three in science and three in mathematics, will be chosen from each state. The two state winners will receive \$5,000, a trip to Washington DC for meetings with the President and business and industrial leaders, and gifts from private donors. All public and private middle/junior or senior high school teachers in Montana who are teaching at least half time in science and/or mathematics are eligible. Teachers must have a minimum of three years teaching experience prior to application. Nominations may be submitted by administrators, teachers, students or parents. For nomination forms or additional information, please contact Dan Dolan, Mathematics Specialist, or Bob Briggs, Science Specialist, OPI (444-4439 or 444-4436).

## Freedoms Foundation at Valley Forge: The National Awards Program

The Freedoms Foundation at Valley Forge has announced its national awards program. Individual citizens or legal residents of the United States, organizations, companies, communities and schools are eligible for various awards. For more information write to Awards Department, Freedoms Foundation, Route 23, Valley Forge PA 19481.



## CONFERENCES

### Computers and Mathematics Conference

On April 29-30 there will be a two-day conference at the University of Montana in Missoula, entitled **Integrating Mathematics and Computer Technology**. Teachers of mathematics in grades 7-12 are invited to participate in this conference, jointly sponsored by UM and the Office of Public Instruction. The program will be funded by monies from EESA Title II, Math/Science legislation. Participants will receive reimbursement for substitute, travel, motel and meal costs. One credit in mathematics will be available for those who choose to complete the necessary work. The program will focus on use of the computer to teach problem solving, geometry, probability and statistics, and the use of graphing packages in algebra. Instructors will be secondary teachers trained as part of the NSF-funded IMPACT project. Participation is limited to 50 teachers, and information has been sent to mathematics chairs at all schools in the state. If you need additional information, contact the Continuing Education Office at UM or Dan Dolan, Math Specialist at OPI, 444-4436.

# CALENDAR

The following is a selection of professional enrichment opportunities and other events of interest to school personnel. For information about specific listings, address inquiries to the contact person noted.

"EDvents," a complete calendar of events, is available on OPI's electronic bulletin board accessed by computer at 444-3481.

## FEBRUARY

**Feb. 26-27**—Conference: *Search For Solutions: Interdisciplinary Curriculum for the Gifted*. Missoula: Nancy Lukenbill, OPI, 444-4422.

**Feb. 25-26**—Conference: *MEIM Conference: Middle School Geometry*. Bozeman: Jim Trudnowski, Carroll College, 442-4450.

**Feb. 26**—Meeting: *Project Excellence Implementation Action Group Meeting*. Helena: Jean Schutt, BPE, 444-6583.

## MARCH

**March 4-8**—Convention: *National Association of Secondary School Principals*. Anaheim, CA: Jesse Long, SAM, 442-2510.

**March 10-12**—Workshop: *Challenge of the Unknown: Math & Science Problem Solving*. Missoula: Dan Dodan, OPI, 444-4436.

**March 11**—Conference: *Resources for the Emotionally Disturbed Student*. Butte: Susan R. Baber, OPI, 444-2046.

**March 12**—Conference: *EYH*. Bozeman: Anna Hansen-Lane, 587-0504.

**March 12**—Conference: *EYH*. Glasgow: Brenda Schye, 228-2154.

**March 14-15**—Workshop: *Assertive Discipline: T.E.A.M. Administrator*. Helena: David Bishop, MALD, 442-2518.

**March 16-17**—Workshop: *Assertive Discipline: T.E.A.M. Administrator*. Bozeman: David Bishop, MALD, 442-2518.

**March 19**—Competition: *Odyssey of the Mind State Student Competition*. Bozeman: Elaine Kohler, Missoula School Dist., 542-4041.

**March 19**—Conference: *EYH*. Billings: Sandy Barz, 657-1081.

**March 19**—Conference: *EYH*. Butte: Nina Klem, 496-4289.

**March 19**—Conference: *EYH*. Helena: Linda Davis, 444-3796.

**March 19**—Conference: *EYH*. Kalispell: Jo Mahoney, 752-1347.

**March 21-23**—Workshop: *Issues for Instructional Technologists*. Billings: Judy Anderson, Colstrip Schools, 748-2920.

**March 21-22**—Workshop: *Assessing and Improving School Climate*. Missoula: David Bishop, MALD, 442-2518.

**March 23-24**—Workshop: *Assessing and Improving School Climate*. Kalispell: David Bishop, MALD, 442-2518.

**March 23-25**—Conference: *Montana State FFA Leadership Conf.*. MSU: Mary Elizabeth McAnlay, OPI, 444-2059.

**March 24-25**—Meeting: *Board of Public Education*. Helena: Claudette Morton, 444-6576.

**March 24-26**—Conference: *Eighth Annual MT Assn. for Gifted & Talented Education*. Billings: Del Siegle, Glendive Schools, 365-2456.

**March 25**—Workshop: *Resources for the Emotionally Disturbed Student*. Fort Peck: Susan R. Bailey, OPI, 444-2046.

**March 26**—Conference: *EYH*. Great Falls: Carol Pritchett, 452-8411.

**March 26**—Conference: *EYH*. Lewistown: Mary Jo Hamling, 538-3263.

**March 26**—Conference: *EYH*. Miles City: Mardi Milligan, 232-3031.

**March 26**—Conference: *EYH*. Missoula: Jody Gerst, Judy Preston, 728-0144.

**March 28**—Conference: *EYH*. Havre: Debbie Kirby, 265-3728.

**March 28-29**—Workshop: *Developing Public Confidence in Your Educational Program*. Billings: David Bishop, MALD, 442-2518.

**March 30-31**—Workshop: *Developing Public Confidence in Your Educational Program*. Glendive: David Bishop, MALD, 442-2518.

## APRIL

**Apr. 7-9**—Convention: *MT Association of School Administrators*. Helena: Jesse Long, SAM, 442-2510.

**Apr. 11-12**—Workshop: *Developing Instructional Supervision Skills*. Missoula: David Bishop, MALD, 442-2518.

**Apr. 13-15**—Conference: *Conference on Services for the Pre-school Handicapped Child*. Billings: Dr. Mike Hagen, MT Center for Handicapped Children, 657-2312.

**Apr. 13-14**—Workshop: *Developing Instructional Supervision Skills*. Kalispell: David Bishop, MALD, 442-2518.

**Apr. 14-16**—Conference: *12th Annual NAVESNP Region V Conference*. Great Falls: Steven White, Vo-Tech Center, 791-2300.

**Apr. 15**—Meeting: *Project Excellence Implementation Action Group Meeting*. Helena: Jean Schutt, BPE, 444-6583.

**April 16**—Conference: *EYH*. Glendive: Roberta Patterson, 365-3396.

**Apr. 16-19**—Convention: *National Association of Elementary School Principals*. San Francisco, CA: Jesse Long, SAM, 442-2510.

**Apr. 20-22**—Conference: *MT Assoc. of Secondary School Principals Spring Conference*. Bozeman: Jesse Long, SAM, 442-2510.

**Apr. 21-23**—Convention: *Montana Home Economics Assn.*. Lewistown: Charlene Garoutte, 538-7033.

**Apr. 22-24**—Conference: *Poudre Institute*. Butte: Marilyn Miller, OPI, 444-3656.

**Apr. 25-26**—Workshop: *Developing Instructional Supervision Skills*. Great Falls: David Bishop, MALD, 442-2518.

**Apr. 27-28**—Workshop: *Developing Instructional Supervision Skills*. Glasgow: David Bishop, MALD, 442-2518.

**Apr. 27-29**—Conference: *2nd Annual Conference on Supported Employment*. Missoula: Mike Kelly, MT Supported Employment Proj., 443-1006.

**Apr. 29-30**—Workshop: *Integrating Mathematics Programs & Computer Technology*. Missoula: Dan Dolan, OPI, 444-4436.

**Apr. 29-30**—Convention: *Montana PTA*. Missoula: Barbara Millhouse, 549-5798.

## MAY

**May 1-2**—Conference: *MT Traffic Ed Assn.*. Great Falls: Curt Hahn, OPI, 444-4432.

**May 2-3**—Meeting: *Board of Public Education*. Helena: Claudette Morton, BPE, 444-6576.

**May 2-3**—Workshop: *Developing Instructional Supervision Skills*. Billings: David Bishop, MALD, 442-2518.

**May 4-5**—Workshop: *Developing Instructional Supervision Skills*. Glendive: David Bishop, MALD, 442-2518.

**May 5-6**—Conference: *MEIM Conference: Secondary School Geometry*. Missoula: Jim Trudnowski, Carroll College, 442-3450.

**May 9-10**—Workshop: *Developing Public Confidence in Your Educational Program*. Missoula: David Bishop, MALD, 442-2518.

**May 11-12**—Workshop: *Developing Public Confidence in Your Educational Program*. Kalispell: David Bishop, MALD, 442-2518.

**May 16-17**—Workshop: *Assessing and Improving School Climate*. Helena: David Bishop, MALD, 442-2518.

**May 18-19**—Workshop: *Assessing and Improving School Climate*. Bozeman: David Bishop, MALD, 442-2518.

**May 18-20**—*MT Special Olympics Summer Games*. Billings: Don Byers, MT Spec. Olympics, 791-2368.

## TELECOMMUNICATIONS

The following are satellite downlink sites. Times listed are Mountain Standard Time.

**Feb. 26**—11:00-noon, Satellite TBA, *Sure! Life: Family, Food, and Fun*. Ron Lukenbill, OPI, 444-2080.

**Mar. 3**—2:45-3:45 p.m., Satellite TBA, *Improving Writing Instruction in Grades K-8*. Connie Lawry, OK State Univ., Educ. Exten., (405) 624-6254.

**Mar. 10**—11:00 a.m.-1:00 p.m., Satellite TBA, *NDN TALK: Teaching Activities for Language Knowledge (K-3)*. Ron Lukenbill, OPI, 444-2080.

**Mar. 11**—9:30-11:00 a.m., Satellite TBA, *SPACEBRIDGE USA-USSR*. Ron Lukenbill, OPI, 444-2080.

**Mar. 15**—12:30-1:30 p.m., Satellite TBA, *NASA Launch Vehicle Preparation*. Ron Lukenbill, OPI, 444-2080.

**Apr. 7**—2:45-3:45 p.m., Satellite TBA, *Adapting Materials for Multiple Levels/Learning Styles*. Connie Lawry, OK State Univ., Educ. Exten., (405) 624-6254.

**Apr. 7**—11:00 a.m.-1:00 p.m., Satellite TBA, *NDN Kindergarten-First Level Mathematics (K-1)*. Ron Lukenbill, OPI, 444-2080.

**Apr. 15**—11:00 a.m.-1:00 p.m., Satellite TBA, *New NDN Programs*. Ron Lukenbill, OPI, 444-2080.

**May 10**—One Day, Satellite TBA, *Emerging Technologies in Modern Language Instruction*. Duane Jackson, OPI, 444-3129.

**May 12**—11:00 a.m.-1:00 p.m., Satellite TBA, *New NDN Programs*. Ron Lukenbill, OPI, 444-2080.

**May 20**—11:00 a.m.-1:00 p.m., Satellite TBA, *New NDN Programs*. Ron Lukenbill, OPI, 444-2080.

# MONTANA SCHOOLS

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